



Receipt
Docket No. SUN-P4935
(811173-000065)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

FILE COPY
#11

APPLICANT: Peter C. Damron
SERIAL NO.: 09/629,085
FILING DATE: July 31, 2000
TITLE: Method and System for Translation Lookaside Buffer Coherence in Multiprocessor Systems
EXAMINER: Reginald Glenwood Bragdon (Tel. No.: (703) 305-3823)
(Fax No.: (703) 872-9306)
ART UNIT: 2188

CERTIFICATE OF MAILING

I hereby certify that this paper is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Office of Initial Patent Examination's Customer Service Center, Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450, on the date printed below:

Date: 3/29/04

Name: Carol Diez

Carol Diez

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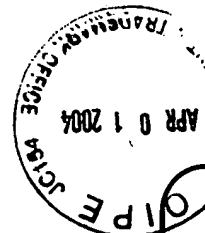
MAY 10 2004

Technology Center 2100

REQUEST TO CORRECT FILING RECEIPT

It is respectfully submitted that the Filing Receipt for the above-identified patent application has an error.

The title is incorrect. The correct title is "Method and System for Translation Lookaside Buffer Coherence in Multiprocessor Systems" and not "Method and System for Translation Lookaside Buffer Cohercnce in Multiprocessor Systems" as indicated on the Filing Receipt. Please amend the Filing Receipt and appropriate records to reflect the correct title. Enclosed is a copy of the first page of the specification filed on July 31, 2000, for the above referenced patent application. Please note that it correctly lists the



TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>	Application Number	09/629,085	
	Filing Date	July 31, 2000	
	First Named Inventor	Peter C. Damron	
	Art Unit	2188	
	Examiner Name	Reginald G. Bragdon	
Total Number of Pages in This Submission	7	Attorney Docket Number	SUN-P4935

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input checked="" type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) <i>(please identify below):</i> Request to Correct Filing Receipt, copy of 1st page of spec., and copy of PTO Filing Receipt dated 9/7/00
Remarks		RECEIVED MAY 10 2004 Technology Center 2100

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	John P. Schaub, Reg. No. 42,125
Signature	
Date	3/28/04

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name	Carol Diez		
Signature		Date	3/29/04

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

title of the invention. In addition a copy of the Filing Receipt showing the requested change is enclosed.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1698.

Respectfully submitted,
THELEN REID & PRIEST LLP

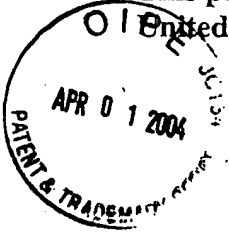
Dated: March 28, 2004



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This patent application is submitted in the name of inventor Peter C. Damron, a citizen of United States, assignor to Sun Microsystems, Inc., a Delaware Corporation.



SPECIFICATION

TITLE OF THE INVENTION

METHOD AND SYSTEM FOR TRANSLATION LOOKASIDE
BUFFER COHERENCE IN MULTI-PROCESSOR SYSTEMS

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BACKGROUND OF THE INVENTION

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Field of the Invention

This invention relates to an apparatus, method and system for translation lookaside buffer ("TLB") coherence in computer systems; more particularly, this invention relates to an apparatus, method and system for TLB coherence in multi-processor computer systems.

The Related Art

Virtual memory systems allow the addressing of large amounts of memory as though all of that memory were the main memory of the computer system even though actual main memory may consist of a substantially lessor amount of storage space. Virtual memory systems accomplish this by providing memory management units which translate virtual memory addresses into physical memory addresses. The physical addresses may be stored in the main computer memory, in cache memory systems, or otherwise.

If the physical address is kept in the main computer memory, the main computer memory uses lookup tables to locate the physical address. The computer compares the virtual address to the values stored in the tables to determine the physical address. There are often several levels of tables, and the comparison takes a long time to locate. To overcome this delay, the physical address may be stored in cache memories. Cache memories are fast components to store recently



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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/629,085	07/31/2000	2751	768	SUN-P4935	3	18	4

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SEP 12 2000

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FILING RECEIPT



OC00000005380442

D'ALESSANDRO & RITCHIE

Date Mailed: 09/07/2000

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the PTO processes the reply to the Notice, the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Peter C. Damron, Fremont, CA ;

Continuing Data as Claimed by Applicant

Reviewed By: Aliso

Date: 9/13/00

No Action Required: X

Action Required: _____

Foreign Applications

If Required, Foreign Filing License Granted 09/06/2000

Title

Method and system for translation lookaside buffer coherence in multi-processor systems

coherence

Preliminary Class

711

Data entry by : BRUNSON, MONIQUE

Team : OIPE

Date: 09/07/2000

